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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,778	06/25/2001	William Hennenlotter	CSCO-98061	1806
7590 02/08/2005 WAGNER, MURABITO & HAO LLP Third Floor Two North Market Street San Jose, CA 95113			EXAMINER SHAH, CHIRAG G	
			ART UNIT 2664	PAPER NUMBER

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/891,778	Applicant(s) ^{CK} HENNENLOTTER, WILLIAM	
	Examiner Chirag G Shah	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,20 and 39 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,14-19 and 27-38 is/are allowed.
- 6) ☒ Claim(s) 1,20 and 39 is/are rejected.
- 7) ☒ Claim(s) 8-13,21-26 and 40-45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 20 and 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (Figure 2, Page 2, lines 21 to Page 3, lines 6) in view of Rochberger et al (U.S. Patent No. 6,456,600).

3. Referring to claims 1 and 39, Applicant Admitted Prior Art discloses on page 2, lines 21 to page 3, lines 6 and in figure 3 of a cross-sectional method and a computer readable medium (node) for diagramming a network having a plurality of devices, comprising the steps of:

a) determining a plurality of hierarchical layers [center portion 32 represents the highest hierarchical layer, e.g., the trunk layer of figure 2] for said network (30), wherein said devices are arranged in said hierarchical layers [the rings 34, 36, and 38 represent different lower hierarchical layers as disclosed in figure 3];

b) determining one or more groups in each hierarchical layer, wherein each group includes at least one device [as disclosed on page 2, lines 21-23, figure 3 illustrates a cross-sectional diagram of the network described in figures 1 and 2, whereas the devices are arranged into hierarchical layers and groups as described in figure 2]; and

Admitted Prior Art fails to disclose network, wherein said multi-layered cross-sectional diagram has a plurality of cross-sectional representations which are similar to each other,

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wherein said plurality of cross-sectional representations have a plurality of sizes, and wherein each cross- forming a multi-layered cross-sectional diagram corresponding to said sectional representation is adapted to represent a group from a hierarchical layer and one or more other groups from another hierarchical layer.

Rochberger discloses in figure 1, claim 1 and in col. 10, lines 44-65, col. 11, lines 6-67 of a diagram illustrating an ATM network comprising a plurality of peer groups and two levels of hierarchy. In figure 1 and respective portions of the specification, Rochberger discloses a peer group A is called the parent peer group and A.1, A.2, A.3 and A.4 are called child peer groups. The two-level hierarchy is adapted to represent a group from a hierarchical layer and one group from another hierarchical layer. In other words, the parent group A having the group A.2 and A.3 can communicate to the lower level nodes such as A.2.3, A.2.2, A.2.1 and A.3.1, A.3.2, A.3.3, and A.3.4 respectively. Thus, the multi-layers cross sectional diagram of figure 1 represents a group from a higher hierarchical layer PG(A) and PG(A.2). Furthermore, as clearly illustrated in figure 1, peer groups have plurality of sizes, since PG(A.2) has 3 nodes and PG(A.3) has 4 nodes. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the Applicant's Admitted Prior to include the features of having a cross-sectional diagram representing a group from a hierarchical layer and one group from another hierarchical layer as taught by Rochberger in order to permit peer groups with large numbers of nodes and links to be represented in a simple fashion with reduction of overhead and further supporting modularity and scalability.

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4. Referring to claim 20, Applicant admitted Prior Art discloses on page 2, lines 21 to page 3, lines 6 and in figure 3 of a computer system for performing a method of diagramming a network having a plurality of devices, comprising the steps of:

a) determining a plurality of hierarchical layers [center portion 32 represents the highest hierarchical layer, e.g., the trunk layer of figure 2] for said network (30), wherein said devices are arranged in said hierarchical layers [the rings 34, 36, and 38 represent different lower hierarchical layers as disclosed in figure 3];

b) determining one or more groups in each hierarchical layer, wherein each group includes at least one device [as disclosed on page 2, lines 21-23, figure 3 illustrates a cross-sectional diagram of the network described in figures 1 and 2, whereas the devices are arranged into hierarchical layers and groups as described in figure 2]; and

Admitted Prior Art fails to disclose network, wherein said multi-layered cross-sectional diagram has a plurality of cross-sectional representations which are similar to each other, wherein said plurality of cross-sectional representations have a plurality of sizes, and wherein each cross-forming a multi-layered cross-sectional diagram corresponding to said sectional representation is adapted to represent a group from a hierarchical layer and one or more other groups from another hierarchical layer. Applicant admitted prior art fails to explicitly disclose of a computer system comprising a bus, a processor coupled to the bus; and a memory device coupled to the bus.

Rochberger discloses in col. 2, lines 47-55 of a node including a node topology database, which imperatively must contain a bus, processor and memory device. Rochberger discloses in figure 1, claim 1 and in col. 10, lines 44-65, col. 11, lines 6-67 of a diagram illustrating an ATM

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network comprising a plurality of peer groups and two levels of hierarchy. In figure 1 and respective portions of the specification, Rochberger discloses a peer group A is called the parent peer group and A.1, A.2, A.3 and A.4 are called child peer groups. The two-level hierarchy is adapted to represent a group from a hierarchical layer and one group from another hierarchical layer. In other words, the parent group A having the group A.2 and A.3 can communicate to the lower level nodes such as A.2.3, A.2.2, A.2.1 and A.3.1, A.3.2, A.3.3, and A.3.4 respectively. Thus, the multi-layers cross sectional diagram of figure 1 represents a group from a higher hierarchical layer PG(A) and PG(A.2). Furthermore, as clearly illustrated in figure 1, peer groups have plurality of sizes, since PG(A.2) has 3 nodes and PG(A.3) has 4 nodes. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the Applicant's Admitted Prior to include the features of having a cross-sectional diagram representing a group from a hierarchical layer and one group from another hierarchical layer as taught by Rochberger in order to permit peer groups with large numbers of nodes and links to be represented in a simple fashion with reduction of overhead and further supporting modularity and scalability.

Allowable Subject Matter

5. Claims 1-6, 14-19, 27-38 allowed.
6. Claims 8-11, 21-26 and 40-45 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703)305-3988, (for formal communications intended for entry)

Or:

(703)305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 6:45 to 4:15, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs
January 24, 2005


Ajit Patel
Primary Examiner